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## NOTICE OF ALLOWANCE AND FEE(S) DUE

30593

7590

07/09/2010

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

CHOWDHURY, NIGAR

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 07/09/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,236	09/03/2003	Kang Soo Seo	46500-000538/US	4847

TITLE OF INVENTION: RECORDING MEDIUM HAVING DATA STRUCTURE FOR MANAGING REPRODUCTION OF SLIDESHOWS  
RECORDED THEREON AND RECORDING AND REPRODUCING METHODS AND APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** **Mail** **Mail Stop ISSUE FEE**  
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**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

30593 7590 07/09/2010  
**HARNES, DICKEY & PIERCE, P.L.C.**  
**P.O. BOX 8910**  
**RESTON, VA 20195**

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/653,236 09/03/2003 Kang Soo Seo 46500-000538/US 4847

**TITLE OF INVENTION: RECORDING MEDIUM HAVING DATA STRUCTURE FOR MANAGING REPRODUCTION OF SLIDESHOWS  
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/12/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
CHOWDHURY, NIGAR	2621	386-095000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2  
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

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30593	7590	07/09/2010	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			CHOWDHURY, NIGAR	
			ART UNIT	PAPER NUMBER

2621

DATE MAILED: 07/09/2010

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 754 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 754 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

## Application No.

10/653,236

## Examiner

NIGAR CHOWDHURY

## Applicant(s)

SEO ET AL.

## Art Unit

2621

### - The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/3/2010.
2. ☒ The allowed claim(s) is/are 1,2,4,13,15-18,20-23,25,29,31-34,36 and 40-44.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 6/1/2010,3/23/2010
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jared Scholz on 06/28/2010.

The application has been amended as follows:

Claims 19, 24, 30, 35 are canceled.

**Underlining part of following claims will be added and strikethrough part of claims will be deleted.**

Claim1. A non-transitory computer readable medium having a data structure for managing reproduction of a slideshow of at least one still image, comprising:

a data area storing first and second stream files, the first stream file including video data for reproducing at least one still image, the second stream file including audio data; and

a playlist area storing a playlist file, the playlist file including at least one playitem and at least one sub-playitem, the at least one playitem indicating an in-point and out-point of the first stream file for reproducing the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the second stream file for

reproducing the audio data and including link information, the link information indicating that the at least one playitem is associated with the at least one sub-playitem,

wherein the playlist file further includes ~~type syne~~ information and repeat information, the ~~type syne~~ information identifying whether reproduction using being ~~indicated by~~ the at least one playitem is synchronized with reproduction using being ~~indicated by~~ the at least one sub-playitem, the repeat information indicating whether to repeat the reproduction using ~~indicated by~~ the at least one sub-playitem.

Claim 2. The non-transitory computer readable medium of claim 1, wherein the link information links the at least one still image and the audio data such that presentation of the at least one still image is synchronized with reproduction of the audio data.

Claim 4. The non-transitory computer readable medium of claim 1, wherein the at least one playitem includes duration information indicating a duration to display each still image during reproduction of the slideshow.

Claim 13. The non-transitory computer readable medium of claim 1, wherein the playlist file includes mark information, the mark information includes a mark pointing to a still image.

Claim 15. A method of reproducing a slideshow of at least one still image from a

recording medium, comprising:

reproducing first and second stream files, the first stream file including video data for reproducing at least one still image, the second stream file including audio data;

reproducing a playlist file, the playlist file including at least one playitem and at least one sub-playitem, the at least one playitem indicating an in-point and out-point of the first stream file for reproducing the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data and including link information, the link information indicating that the at least one playitem is associated with the at least one sub-playitem,

wherein the playlist file further includes ~~type sync~~ information and repeat information, the ~~type sync~~-information ~~identifying indicating~~ whether reproduction using ~~being indicated by~~ the at least one playitem is synchronized with reproduction using ~~being indicated by~~ the at least one sub-playitem, the repeat information indicating whether to repeat the reproduction using ~~indicated by~~ the at least one sub-playitem.

Claim 16. An apparatus for reproducing a slideshow of at least one still image from a recording medium, comprising:

a pick up configured to reproduce data recorded on a recording medium;

a controller configured to control the pick up to reproduce first and second stream files, the first stream file including video data for reproducing at least one still image, the second stream file including audio data, and configured to control the pick up to reproduce a playlist file, the playlist file including at least one playitem and at least

one sub-playitem, the at least one playitem indicating an in-point and out-point of the first stream file for reproducing the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data and including link information, the link information indicating that the at least one playitem is associated with the at least one sub-playitem,

wherein the playlist file further includes ~~type~~ sync information and repeat information, the ~~type~~ sync information ~~identifying indicating~~ whether reproduction using ~~being indicated by~~ the at least one playitem is synchronized with reproduction using ~~being indicated by~~ the at least one sub-playitem, the repeat information indicating whether to repeat the reproduction using ~~indicated by~~ the at least one sub-playitem.

17. A method of recording a data structure for managing reproduction of a slideshow of at least one still image on a recording medium, comprising:

recording first and second stream files, the first stream file including video data for reproducing at least one still image, the second stream file including audio data; and

recording a playlist file, the playlist file including at least one playitem and at least one sub-playitem, the at least one playitem indicating an in-point and out-point of the first stream file for reproducing the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data and including link information, the link information indicating that the at least one playitem is associated with the at least one sub-playitem,



wherein the playlist file further includes ~~type syne~~ information and repeat information, the ~~type syne~~ information ~~identifying indicating~~ whether reproduction using ~~being indicated by~~ the at least one playitem is synchronized with reproduction using ~~being indicated by~~ the at least one sub-playitem, the repeat information indicating whether to repeat the reproduction using ~~indicated by~~ the at least one sub-playitem.

18. An apparatus for recording a data structure for managing reproduction of a slideshow of at least one still image on a recording medium, comprising:

a pick up configured to record data;

a controller configured to control pick up to record first and second stream files, the first stream file including video data for reproducing at least one still image, the second stream file including audio data, and configured to control the pick up to record a playlist file, the playlist file including at least one playitem and at least one sub-playitem, the at least one playitem indicating an in-point and out-point of the first stream file for reproducing the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data and including link information, the link information indicating that the at least one playitem is associated with the at least one sub-playitem,

wherein the playlist file further includes ~~type syne~~ information and repeat information, the ~~type syne~~ information ~~identifying indicating~~ whether reproduction using ~~being indicated by~~ the at least one playitem is synchronized with reproduction using

~~being indicated by~~ the at least one sub-playitem, the repeat information indicating whether to repeat the reproduction using indicated by the at least one sub-playitem.

### **Reasons for Allowance**

Claims 1, 2, 4, 13, 15-18, 20-23, 25, 29, 31-34, 36, 40-44 are allowed.

The following is an examiner's statement of reasons for allowance: The present invention is directed to a data structure for managing reproduction of a slideshow of at least one still image.

The following is a statement of reasons for the indication of allowable subject matter: The independent claims 1, 15, 16, 17, 18 are identifies the uniquely distinct feature for "the playlist file further includes type information and repeat information, the type information identifying whether reproduction using the at least one playitem is synchronized with reproduction using the at least one sub-playitem, the repeat information indicating whether to repeat the reproduction using the at least one sub-playitem"

**Ando et al., US 2001/0046371** discloses audio information is recorded in units of tracks on an information storage medium on which audio information and management information that pertains to the audio information are recorded, and information indicating the playback sequence of the audio information is recorded in the management information. Furthermore, information indicating break positions of tracks

with respect to the audio information is recorded in the information indicating the playback sequence.

**Nakai et al., US 5,999,698** discloses in reproduction of a predetermined title recorded on an optical disk, when multiangle video images are recorded on the optical disk, an angle mark having a form of a camera is turned on. During reproduction of this title, when reproduction reaches a multiangle video image recorded portion, the angle mark flashes so that a viewer or user of the video can be notified of a state in which video reproduction at an angle different from that of the currently reproduced video image is possible.

None of the prior art, either singularly or in combination, fails to anticipate or render the above underlined limitations obvious. Claims 2, 4, 13, 20-23, 25, 29, 31-34, 36, 40-44 are dependent on claims 1, 15, 16, 17, 18 and therefore dependent claims also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC  
07/01/2010

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621